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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,246

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Yasutsugu Uejima

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12/07/2010

LOWE, HAUPTMAN, HAM & BERNER, LLP (ITW)

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ALEXANDRIA, VA 22314

EXAMINER

WEEKS, GLORIA R

ART UNIT

PAPER NUMBER

3721

MAIL DATE

DELIVERY MODE

12/07/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/599,246	Applicant(s) UEJIMA ET AL.	
	Examiner GLORIA R. WEEKS	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the amendment and remarks received on September 22, 2010.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5, 6, 13, 14 and 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crutcher (USPN 5,772,098) in view of Dittrich et al. (USPN 6,712,255).

In reference to claims 5, 6, 13, 14, 16-23, Crutcher discloses a portable type fastener driving tool comprising: a main body 3 housing a rod; a combustion driven rod (within 4); a head part 8 disposed on a front end of the main body 3 which is provided with a fastener guiding part; a round drum shaped fastener magazine 2 including a cover ; and a power operated 30 fastener feed means disposed at the head part 8 on the fastener retaining means, the fastener feed means including a rotary type feed member 42 that rotates about a point 39. Crutcher does not disclose the rotary feed member to be electrically actuated.

Dittrich et al. teaches a portable type fastener driving tool comprising: a rod 12 movable within a main body 11; a head part 13' disposed on the front end of the main body 11, the head part 13' defines a fastener guide part; and feeding mechanism comprising: a rotary feed member 61 driven by an electric motor 63 and a rotary feed gear assembly 64, wherein the rotary feed

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member is controlled an electric circuit (column 7 lines 62-67). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the rotary feed member to have a separate power source than the drive rod, such that the rotary feed member is electrically actuated while the rod is combustion actuated, since column

4. Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crutcher (USPN 5,772,098) in view of Dittrich et al. (USPN 6,712,255) as applied to claim 5, and further in view of Maynard (USPN 3,628,715).

Regarding 7-12, Crutcher discloses a fastener driving tool comprising a rod and a rotary feed member as modified in view of Dittrich et al., wherein the a control circuit monitors actuation of the rotary feed member based on a predetermined process; however a first and second sensor are not disclosed. Maynard teaches a fastener driving tool comprising a first sensor 32 that detects a retracted position of a drive rod; and a rotary feed member 34 associated with a sensor (column 5 lines 9-11) that detects rotation of the feed member and controls rotation of the feed member in response to the sensor (column 1 lines 20-28). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the control circuit of Crutcher to include connection to a first and second sensor as claimed, since column 5 lines 12-13 of Maynard suggests that such a modification ensures proper positioning of a fastener prior to actuation of the rod, such that jamming an improper driving of the fastener is prevented.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crutcher (USPN 5,772,098) in view of Dittrich et al. (USPN 6,712,255) as applied to claim 5, and further in view of Potuccek (USPN 4,383,608).

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With respect to claim 15, Crutcher discloses a fastener driving tool comprising a rotary feed member 43 comprising multiple protrusions 45, 46 that engage different portion of a fastener, but Crutcher does not disclose the rotary feed member including an endless belt. It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the rotary feed member of Crutcher to include a second rotary feed member and endless belt having a plurality of protrusions, since column 1 lines 46-50 of Potuccek states that such a modification provides desired spacing between a plurality of fasteners thereby ensuring positive feed of the fasteners to a proper position with respect to the rotary feeder and a drive rod.

Response to Arguments

6. Applicant's arguments filed September 22, 2010 have been fully considered but they are not persuasive.

7. The primary reference, Crutcher, discloses a fastener feeding mechanism oriented on a portable fastener driving tool as claimed; however, Crutcher discloses the fastener feeding mechanism to be actuated by a pneumatic driven piston separate from the pneumatic actuation of a fastener driver. Dittrich et al. teaches a feeding mechanism oriented on a portable fastener, wherein the feeding mechanism, like Crutcher, is independently actuated from a pneumatic driven piston. Furthermore, the feeding mechanism of Dittrich et al. is motor actuated. Although the motor actuated feeding mechanism of Dittrich et al. is used to feed¹ a strip of propellant from a fastener feeding mechanism.

¹ Feed: to supply (<http://dictionary.reference.com/browse/feed>)

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8. Nonetheless, Examiner has relied upon Dittrich et al. for its teaching of separate actuation of distinct elements of a fastener driving tool, wherein one element is actuated by a pneumatic source and the other element is actuated by an electric motor. Column 3 lines 24-32 of Dittrich et al. is found to be sufficient teaching and motivation to modify the feeding mechanism of Crutcher, since such a modification permits an element to be electronically controlled thereby allowing the element to operate independently under predetermined criteria.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GLORIA R. WEEKS whose telephone number is (571)272-4473. The examiner can normally be reached on M-W & F 8:30am-12:30pm, 3:30pm-6:30pm and 9pm-10pm; Th 9am-2pm, 4pm-6pm and 9pm-10pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Other helpful telephone numbers are listed for applicant's benefit:

- Allowed Files & Publication (888) 786-0101
- Assignment Branch (800) 972-6382
- Certificates of Correction (703) 305-8309
- Fee Questions (571) 272-6400
- Inventor Assistance Center (800) PTO-9199
- Petitions/special Programs (571) 272-3282
- Information Help line 1-800-786-9199

/Gloria R. Weeks/
Examiner, Art Unit 3721

/Rinaldi I Rada/
Supervisory Patent Examiner, Art Unit
3721

December 6, 2010